

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D  
& INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV. 2

REF. TCCA STC SH12-3

REF. FAA STC SR03091NY

REF. EASA STC 10039042

## 1.0 PURPOSE

THE PURPOSE OF THIS DART SERVICE INSTRUCTION (DSI) IS TO FACILITATE INSTALLATION OF THE RETAINERS ON THE LOWER PORTION OF THE WINDSHIELD, FOR D206-817-011 KITS AT CHG 005 OR LATER, BY REPLACING THE RIGID D4545-041/-042 RETAINER ASSEMBLIES WITH SEPARATE BRACKETS AND RETAINERS THAT ARE ASSEMBLED BY THE INSTALLER AND ALLOW FOR EASIER ADJUSTMENT.

## 2.0 PARTS LIST

(IS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4541-1	BRACKET
1	D4541-2	BRACKET
1	D4542-1	RETAINER
1	D4542-2	RETAINER
190	MS20426AD3-4	RIVET
43	MS21059L08	NUTPLATE
93	MS21059L3K	NUTPLATE
2	MS21061L3K	NUTPLATE
42	MS27039-0810	SCREW
42	NAS1149DN832J	WASHER

(ADDED)

(WAS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4545-041	RETAINER, LH INNER (LOWER)
1	D4545-042	RETAINER, RH INNER (LOWER)
112	MS20426AD3-4	RIVET
23	MS21059L08	NUTPLATE
56	MS21059L3K	NUTPLATE
22	MS27039-0810	SCREW
22	NAS1149DN832J	WASHER

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 14.03.18

CERT. NO.: SH12-3

ISSUE NO.: 1

A	NEW ISSUE	AJS	14.03.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9687	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		RETAINER UPGRADE	NTS
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### 3.0 INSTALLATION

IF INSTALLING A D206-817-011 KIT AT CHG 005 OR LATER, STEP 3.3 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV D IS MODIFIED IS FOLLOWS:

3.3 Install Dart inner retainers. It is acceptable to hand form retainers as required to allow fit. Retainers should be located so that they are approximately flush with the aircraft skin. Locate retainers and transfer drill  $\varnothing 0.128$ " from aircraft frame. Locate as follows, using Figure 3-2 as reference:

- Locate D4541-1/-2 Brackets along the bottom window frame flush against the door pillars. The Bracket should be oriented with the hole pattern for the MS21061L3K nutplate (the non-symmetric nutplate, ref) near the door post. See Figure 3-3 for reference.
- Locate D4541-3/-4 Brackets on the door pillars, above the -1/2 Brackets. See Figure 3-3.
- Locate D4541-5/-6 Brackets above the -3/-4 retainers. See Figure 3-4.
- Locate D4541-7/-8 Brackets along the top edge, with one side aligned with the center column. See Figure 3-4.
- Relocate the 206-031-112-039 (or equiv.) clip removed at step 3.2(g) per Figure 3-3.

Install brackets wet with Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 sealant between retainers and a/c frame. Fasten D4541-1/-2 Lower Inner Brackets with CR3214-4 (or NAS9301B or M7885/2) rivets and NAS1149DN432J (or 140-001-1 or AN960JD4 or equiv.) washers. Fasten D4541-X Brackets with MS20600AD4 rivets. Reinstall clip (206-031-112-039 or equiv.) with CR3213-4 rivets. See Figure 3-3 for reference.

\*Note: Due to variations in airframes the D4541-X Brackets have been designed with extra material for ease of installation and to maintain a good edge distance. Excess material may be trimmed. Touch-up trimmed parts with alodine 1200/1201 per MIL-C-5541.

3.4 Locate D4542-X Retainers onto the D4541-X Brackets as follows, see Figures 3-3 & 3-4 for reference:

- Locate D4542-1 Retainers onto the D4541-1/-2 Brackets
- Locate D4542-3 Retainers onto the D4541-3/-4 Brackets
- Locate D4542-5 Retainers onto the D4541-5/-6 Brackets
- Locate D4542-7 Retainers onto the D4541-7/-8 Brackets

Hand form D4541-X Brackets and/or D45421-X as required to fit profile of windshield. Locate and transfer drill rivet holes to D4542-X Retainers and open to  $\varnothing 0.098$ . Locate and transfer drill screw holes and open to  $\varnothing 0.250$ ". Dimple the  $\varnothing 0.098$  holes  $\varnothing 0.180 \times 100^\circ$  and install MS21059L3K nutplates with MS20426AD3-4 rivets.




\*Note: Due to variations in airframes the D4542-5 Retainer has been designed with extra material for ease of installation and to maintain a good edge distance. Excess material may be trimmed. Touch-up trimmed parts with alodine 1200/1201 per MIL-C-5541.

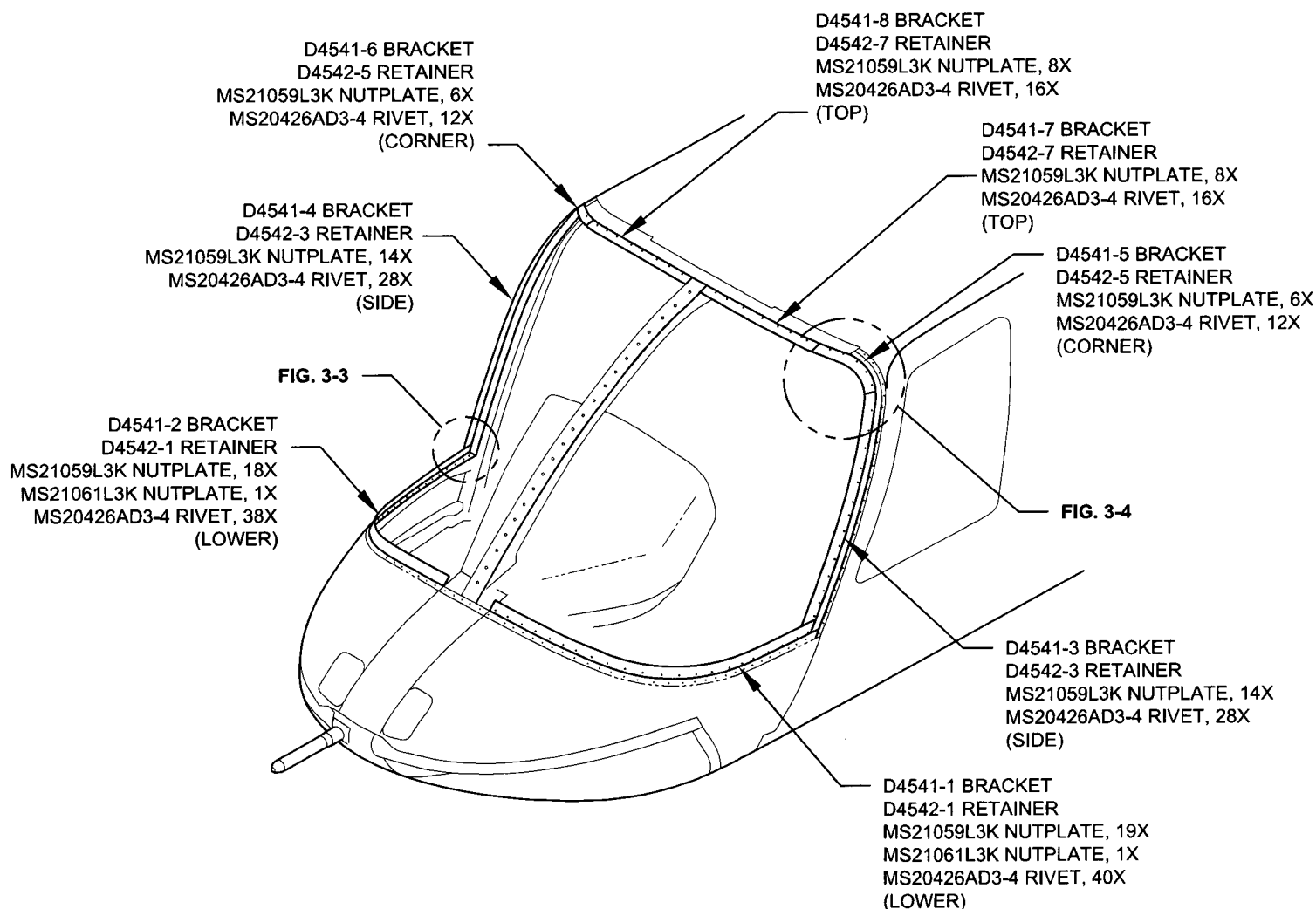
FIGURES 3-2 & 3-3 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D ARE MODIFIED AS SHOWN ON SHEETS 3 AND 4 OF THIS SERVICE INSTRUCTION.

### 4.0 WEIGHT AND BALANCE

THIS CHANGE HAS NO EFFECT ON THE WEIGHT AND BALANCE.

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED 	
BY:	D. SHEPHERD (DE # 02)
DATE:	14.03.18
CERT. NO.:	SH12-3
ISSUE NO.:	1

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9687	SHEET 2 OF 4
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**FIGURE 3-2**  
(REF IIN-D206-817 REV D)

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AIRCRAFT CERTIFICATION  
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DAO # 01-O-01

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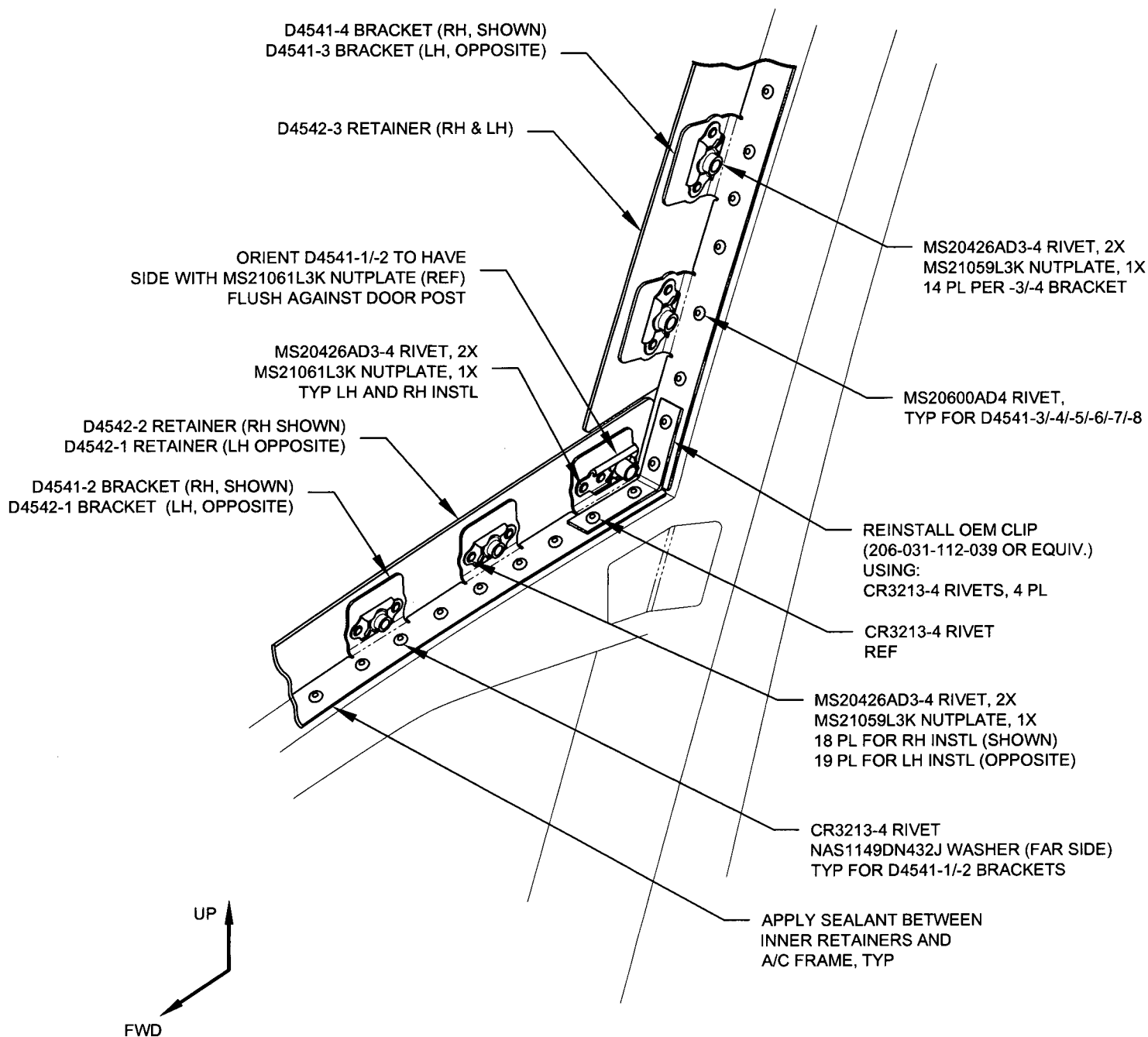
D. SHEPHERD (DE # 02)

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**FIGURE 3-3**  
(REF IIN-D206-817 REV D)

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DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

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